DOCUMENT RESUME

ED 128 874 95 EA 008 583

AUTHOR	Shepard, Morris A.; Reed, Mary
TITLE	A Research Agenda for Year-Round Schools: Executive Summary. Volume 1.
INSTITUTION	Abt Associates, Inc. Cambridge, Mass.
SPONS AGENCY	Department of Health, Education, and Welfare, Washington, D.C. Office of the Assistant Secretary for Planning and Evaluation.
REPORT NO	AAI-75-159
PUB DATE	8 Dec 75
CONTRACT	HEW-100-75-0113
NOTE	34p.; For a related document, see EA 008 584
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Educational Research; Elementary Secondary Education; *Experimental Programs; Extended School Year; Program Descriptions; Program Evaluation; *Research Needs; School Calendars; Tables (Data); *Year Round Schools

ABSTRACT

The information and recommendations presented in this report are a distillation of a more extensive companion volume, "The Importance of Year-Round Schools." Together both volumes fully describe the second phase of a national study of year-round schools (YRS) that was initially begun by the National Council of Year-Round Education in 1975. The purpose of this executive summary is to provide a brief overview of information collected and analyzed during the study's second phase and to describe a set of needed research projects. The research agenda presented in this report results from study of the present status of year-round schools, examination of extant evaluations and planning studies, and discussions with leading educators and administrators in the YRS movement. To facilitate access to more detailed information, this volume is cross-referenced to appropriate sections of "The Importance of Year-Round Schools." The appendix contains a summary of demographic and programmatic data on the 24 school districts studied in phase 2, as well as a summary of educational and financial evaluations of YRS programs that were conducted in the study districts. (Author/JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ABT ASSOCIATES INC.
55 WHEELER STREET, CAMBRIDGE, MASSACHUSETTS 02138
TELEPHONE • AREA 617-492-7100
TELEX: 710-320-6367

AAI #75-159

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Contract No. HEW-100-75-0113

A RESEARCH AGENDA FOR YEAR-ROUND SCHOOLS

EXECUTIVE SUMMARY

VOLUME I

December 8, 1975

Authors:

Dr. Morris A. Shepard

Ms. Mary Reed

Mr. Peter Desmond, Editor

Prepared For:

Department of Health, Education and Welfare
Office of the Assistant Secretary for
Planning and Evaluation
Washington, D.C.

M. A. Shepard	M. A. Shepard	M. A. Shepard
Contract Manager	Quality Control Reviewer	Management Reviewer

Table of Contents

		Page
1.0	Introduction	1
	1.1 Approach	1
	1.2 Research Products	2
2.0	Why is YRS Important?	3
3.0	Who Should Conduct Policy-Relevant YRS Research?	7
4.0	What Types of Research Projects Should Be Undertaken?	8
	4.1 Methodology	8
	4.2 Social Intervention Strategy	10
	4.3 Operational Projects	12
	4.4 Long-Range Policy Studies	13
5.0	Summary of Findings	17
	Appendix A: Demographic and Programmatic Data	21
	Appendix B: Summary of Educational and Financial Evaluations	24

Preface

The information and recommendations presented here are a distillation of a companion volume, The Importance of Year Round Schools. Both volumes comprise the second phase of DHEW's investigation of Year-Round Schools (YRS)--building upon the initial effort of the National Council of Year-Round Education. (Models and Issues, DHEW, May, 1975.)

The purpose of the executive summary is to provide a brief overview of information collected and analyzed during this second phase and to describe a set of needed research projects. The research agenda presented in Section 4 below results from study of the present status of YRS, examination of extant evaluations and planning studies, and discussions with leading educators and administrators of the YRS movement. To facilitate access to more detailed information, this volume has been referenced to appropriate sections of Volume II.

Finally, it should be noted that the assistance of Dr. Keith Baker of the Office of Assistant Secretary for Planning and Evaluation, Mr. James Baker of Watsonville Year-Round School, and Dr. Donald Glines of the Year Round Schools Council and the California Department of Education has been invaluable in completing this phase.

1.0 Introduction

Two basic goals guided the development of a research agenda for the Year-Round Schools (YRS) movement: first, to address the long-range policy concerns of the federal government, and secondly, to devise a set of projects which might assist Year-Round Schools in their day-to-day operations. The research agenda found in Section 4 of this volume is based on the information Abt Associates staff collected and analyzed in order to answer three questions:

- Why is YRS important?
- Who should be conducting YRS research?
- What types of research projects should be undertaken?

Before answering the above questions, mention should be made of the various steps that were taken in developing a data base which could adequately document and analyze extant research and opinions about YRS as a social intervention process and educational innovation.

1.1 Approach

In seeking answers to the above policy questions, a series of tasks were performed, each developing logically out of the information the preceding activity provided. The four major activities were:

- A literature search and review;
- Telephone discussions with YRS operators;
- Discussions with YRS authorities;
- Informal discussions in Washington, D.C. with private and public educational researchers.

Brief descriptions of each of these activities can be found in Chapter 1 of Volume II, on pages 2-16.[1]

[1] Appendix B, on pages 115-128 of Volume II, contains the bibliography of works consulted.

Data from 24 specific school districts form the basis for this study. These data were obtained both from written information sent by the districts and as a result of telephone conversations with administrators or program directors in the districts. In order to assure that throughout the study of these programs all individuals involved systematically collected and recorded the same types of data, two matrices were developed--Characteristics of Year-Round Schools and Evaluation of YRS Model. Descriptions and samples of the two matrices, with an explanation of the terms used on each, are to be found on pages 3-14 of Volume II.

1.2 Research Products

Four major products, developed from the activities enumerated, comprise the bulk of Volume II.

- A history of year-round schools in the United States constitutes Chapter 2 of Volume II (pp. 19-41).
- A comparative analysis of the 24 YRS programs (with three case studies) occupies pages 42-59 in Chapter 3 of Volume II (demographic and programmatic data for all sites are displayed in Appendix A of this volume); and a critique of program evaluations conducted in these districts can be found later in the chapter on pages 65-80 (a summary of educational and financial evaluations is included in Appendix B of this volume).
- The California substudy is on pages 59-65 of the same chapter.
- Finally, a description of needed YRS policy research appears in Chapter 4 of Volume II; for convenience, it is included as Section 4 of this volume as well.

Further references to Volume II will be made in the ensuing discussions of each of the three policy questions.

2.0 Why is YRS Important?

Year-Round School is an educational innovation initiated by school districts to save money by using school facilities and resources more efficiently, and in many cases to provide a more interesting, more individualized education. YRS accomplishes or facilitates these goals by staggering student attendance in school so that some percentage of students are in regular terms during each season of the year.

Although minimally supported with state or federal monies, YRS has grown dramatically since the late 1960s when only a few such programs were in operation. Today, there are approximately 100 YRS programs in operation in the U.S., with an additional 96 districts studying, planning or implementing some form of YRS or extended school year plan.

This recent growth of YRS is a direct result of the development of the 45-15 model, a particular YRS plan which provides for a staggered series of 45-day instructional periods alternating with 15-day vacations throughout the year. With such a plan, 25% of the student body is always on vacation. The 45-15 plan overcame the drawbacks of other YRS plans which had been implemented at various times throughout history.[1]

Historically, YRS tended to occur in school districts when they were faced with an influx of new students (as at the end of both World Wars or during periods of heavy immigration) or a teacher shortage, or when they wished to maximize the use of existing school facilities in order to postpone the building of new ones. These past implementations of YRS were always viewed as <u>temporary</u> responses to crises, because while they might alleviate overcrowding problems, in doing so they

---

[1] An explanation of the various YRS models currently in use, including schematic diagrams of each, is to be found on pages 31-41 of Volume II.

created additional problems which made YRS unpopular as a permanent calendar adjustment. 45-15 overcame the drawbacks of past YRS plans by providing three major innovations:

- a summer vacation for all children;
- a rescheduled school year which does not necessarily accelerate students out of a school system at too early an age;
- a series of shorter and more frequent vacations than the traditional school schedule.

As a consequence of these three innovations, YRS began to acquire acceptance and popularity as a useful, effective response to district crises. Also, interest in YRS was sparked from an educational perspective due to its inherent value as an exciting format for curricular innovation.

Educators began to call into question the relevance of the traditional school calendar: "Is the traditional calendar no more than an educational and social anachronism, simply adhered to out of custom?" Today, while most YRS programs are implemented out of necessity, an increasing number of districts begin YRS because they consider it a desirable--even preferable--school calendar. Districts are making YRS a permanent change in the school calendar not only to address the economic conditions but also the educational and social demands of the time.[1]

Although an increasing number of districts are implementing YRS programs, a review of existing YRS research and evaluations conducted by school districts indicates that thus far the evaluations are of generally poor quality, are not useful planning tools for those districts considering YRS, and have

[1] Chapter 2 of Volume II contains the detailed history from which these conclusions are drawn.

not conclusively answered the three basic questions districts pose when initially studying YRS: Will it be favorably received? Will it affect student learning? Will it save money?

Lack of conclusive evaluation data for these basic questions reflects in part the lack of appropriate evaluation instruments. For example, present evaluation methodologies are not appropriate to an accurate determination of at least one of the hypothesized benefits of the more educationally innovative YRS programs--the affective/non-cognitive growth of students. Standardized achievement tests used by most districts to measure student gain in YRS were developed to measure basic cognitive skills, and do not therefore provide a measure of what is perhaps one of the most significant benefits of YRS.[1]

In addition, many of the areas hypothesized to be affected by YRS have not even been explored. A wide range of potential social and educational impacts, important not only to school districts and communities, but also to the federal government, have yet to be seriously studied. YRS activities may be affecting the outcomes or intersecting with the activities of a variety of federal programs, particularly those directed at disadvantaged or migrant children. It is these hypothesized relationships between federal activities and goals and local YRS programs which may be most revealing about the importance of YRS. Some aspects of YRS which may be affecting federal programs include the following:

- Teachers find that in YRS (especially 45-15) shorter vacations seem to prevent the learning loss which occurs over the traditional three-month summer vacation. This decrease has special meaning for the disadvantaged child who, lacking an educationally supportive home environment, typically returns to school after

[1] This question is discussed on pages 72-75 of Volume II as part of the critique of YRS evaluations.

the long summer vacation farther behind than middle-class schoolmates. YRS may serve a compensatory education function for these children.

- YRS provides migrant or military children with the opportunity to have a normal, continuous education despite their mobile lifestyle. The series of staggered entries which YRS provides throughout the year could help to prevent these children from having to enter school in mid-semester or from having to leave before the school year is up.

- Relatively few secondary level YRS programs exist and those which do have hardly been studied. Little if any attention has been paid to the effect of YRS on drop-out rates and student motivation or the success school districts have had in facilitating work/study at the high school level. Such YRS programs may in effect be accomplishing the goals of the federal government's career education program; or they may be ideal situations in which federally-funded career education programs could be implemented.

Other areas where YRS and the activities and/or goals of federal programs may intersect include:

- conservation of natural resources through decreased school building in those cases where capital building savings are a goal;

- more efficient use of recreational facilities, such as those of the National Park Service;

- improved ethnic balance within an entire school system or within a particular school;

- more comprehensive town recreation or community group programs with the spreading of demands for activities and services throughout the seasons rather than primarily in summer. Such programs could be effectively coordinated with schools' physical education and arts and craft programs;

- decrease in juvenile delinquency because children would no longer be "on the streets" for the three-month summer vacation. (Where

studied, vandalism and juvenile delinquency rates have declined in districts with a YRS program.)

- YRS and its effect on the overall quality of community and family life.

These areas of YRS impact are as yet unstudied. Even the three basic questions about YRS are inconclusively answered because, while districts recognize the need for data on YRS, they do not have the technical skills or financial resources necessary to conduct scientific studies which are methodologically sound; nor are they in a position which provides them with an overview of YRS sufficiently broad to suggest many of the above studies.

3.0 Who Should Conduct Policy-Relevant YRS Research?

In view of the importance of YRS today, as suggested in the previous section, it is perhaps surprising that the federal government, which plays a preeminent role in educational innovation and evaluation, seems not to be particularly interested or involved in YRS. But a series of interviews conducted in Washington, D.C. with educational researchers in both the federal and private sectors indicated a general lack of interest and of accurate knowledge about YRS. Federal policymakers--notably those in the Office of Education and the National Institute of Education--were unaware of the potentials of YRS and of the ways in which YRS related to their particular missions.[1]

At present, ASPE is the only office in the federal government which has evidenced an interest in and knowledge of YRS. In addition, only ASPE has a mission sufficiently broad to encompass the wide range of areas potentially affected by YRS. Within DHEW it is charged with responsibility for investigating

[1] Pages 87 to 90 of Volume II contain an account of these discussions.

social change programs which have at least the potential to benefit minorities and other special groups. Because evidence, although inconclusive, indicates that YRS has had beneficial effects on disadvantaged children, on migrant children, and on children of military families, among others, YRS falls logically into ASPE's purview. It is ASPE therefore who has the authority, resources, and interest necessary to conduct much-needed policy-relevant research into YRE.

4.0 What Types of Research Projects Should Be Undertaken?

This section contains the research agenda developed during the course of our study.[1] It is presented under four major rubrics: methodology; social intervention; operational projects; and longterm policy research. An agenda which has been divided into these major categories can assist policy researchers in their decision-making process in the following ways. Depending upon their particular R&D approach, they can choose a series of related or disparate research topics. Also, given the usual scarcity of funds, the agenda can be implemented in stages or as a complete package. Finally, a tie-in to other ongoing educational research has been suggested.

4.1 Methodology

One of the most important reasons that ASPE should actively pursue a set of YRS research projects is because it is an extremely cost-effective research arena. Methodologically, any of the specific YRS projects suggested below fall into a natural study category which means that the federal government does not have to pay for the operation of the program: it merely pays for the design, data gathering, and analysis. Also there is a sufficient number of YRS projects currently operating

[1] The reader is referred to pages 90-93 of Chapter 4, Volume II, for a number of prefatory considerations.

to fulfill the needs of almost any design for sampling variables needed to answer questions about a wide range of concerns. That is, YRS programs are spread throughout the U.S. and operating in a sufficient variety of demographic settings so as to make a quasi-experimental design implementable. Also given that YRS programs are at different stages of development, receive different types of assistance, and operate on a wide spectrum of calendars, it offers a research arena in which hypotheses can be tested across programs, school districts, and even at the school and classroom levels.

Methodologically, it would also seem feasible to tie in a YRS research project--especially the student achievement portion--to one of the ongoing Follow-Through, Headstart or Title I evaluations. This could possibly even occur so that YRS schools and classrooms could be tested as control groups for these other programs and the same data used for an experimental group of the YRS study. Thus, one series of measurements would serve two purposes.

At another level a YRS research agenda might be of major assistance to states and local school districts in their attempts at answering questions of both effectiveness and costs. For example, a federal study might assist a state in providing its policy makers with empirically derived answers so as to avoid an event which occurred in California--the incoming Governor wanted to cancel the YRS projects because he had no information.

Given that some YRS programs have sensed the need for evaluation, ASPE could buttress this impulse by funding a national study which had sufficient monies to give technical assistance to SEAs and LEAs about evaluation design methodologies. The assistance could take several forms and at the top of the list would be an attempt to implement a cost-accounting system which would allow schools to accurately determine whether YRS

did in fact represent a savings in the short term and over time. There are a variety of such cost-allocation systems around and each RFP issued from a federal policy shop seems to have its own special system; however, this would be a pertinent research arena to vary cost-allocation systems or to fully test one in a variety of settings.

Finally, the last major YRS methodological advantage is that it naturally encompasses hypotheses about the effects of an innovative educational program on students, the school system, the community, and indeed for our entire society. For example, will YRS facilitate or accelerate growth among the range of students and especially educationally disadvantaged or economically poor ones as well as those who have special needs because of mental or physical disabilities? At the same time hypotheses about the interactive effects of school changes on a community (Will it increase or decrease delinquency? Will recreational facilities be more crowded? Will industries be adversely affected?) can be explored as can those on the larger society (Will migrant children stay in school longer? Will YRS tend to produce 16 year olds who have graduated high school and add to our labor market problems?).

4.2 Social Intervention Strategy

YRS is important because it is generally a locally initiated program. Therefore a research agenda which includes an opportunity to explore the hows, whys, and effects of such a widespread phenomenon is indeed a rich opportunity. Along these lines, educational researchers usually are concerned with why certain programs seem to flourish in some settings and not in others. Therefore a study which looked at the range of programs with a view of understanding what facilitated and/or hindered the growth of an experiment would be extremely useful. For example, the current information would tend to

indicate that much more attention needs to be paid to state level planning and technical assistance if innovations are to reach fruition.

The next major set of questions which could be asked under this category of studies is concerned with helping solve major and pressing social problems. For example, a federal judge recently took over a South Boston school because, allegedly, it had been resistant to the court's desegregation orders. YRS has been touted in some areas as a method to achieve racial balance. The scenario seems to be that YRS could be offered as an option in one school of a district currently under desegregation orders. With the advent of YRS in one of its schools, parents and students would be given a new option, curriculum reform accomplished and teachers retrained. Implementation of a YRS program offers the opportunity to make educational changes, reassign teachers, and account for parental and student preference under the flag of innovation rather than a legal mandate. Experience has demonstrated that a YRS option will tend to integrate a school within a district, and yet no one seems to know why.

Along with the larger methodological and societal issues, there are at least two specific types of research projects, one set of which could be of immediate assistance to currently operating YRS projects and the other of which is aimed primarily at answering suggested federal policy questions. The following agenda assumes that LEAs will continue to implement YRS programs and that the larger national policy issues raised above are and will be operative--that they are part of a rational federal R&D policy. The two broad areas are:

- projects to assist in the planning and development of YRS programs
- projects to provide answers to long term policy questions.

Based on our experience in examining the YRS movement, a hierarchy of projects has been proffered. The categories represent our best estimate as to their importance both from the perspective of operating programs and that of the dearth of rational data on the effectiveness of YRS and associated costs. However, the division is somewhat artificial in that all of the operational projects suggested would assist, to some extent, in developing a national longitudinal data base.

The following projects have been designed with the idea that their inclusion would represent a major change in federal R&D policy: instead of evaluating programs designed to respond to a social crisis (Evaluation of Title I for example) the following set of projects offer an opportunity to rationally guide the development of what could become a major change in our society. The following agenda has been designed in the light of YRS's documented importance, the dearth of extant relevant studies, and the absence of present concern; and as a continuation of ASPE's present concern.

4.3 Operational Projects

- A nationwide survey to provide concrete, accurate data on the size of YRS--number of students, programs, number of districts considering YRS--and the characteristics of each program.
- Policy analysis of barriers/facilitators in Federal program regulations. Consequences of different nation-wide levels of YRS on Federal programs.
- Analysis of existing state education legislation to identify barriers to YRS in present legislation, describe nature and scope of needed enabling legislation.
- Collect census, demographic and attitudinal data, interview school officials and community people to determine why some school districts start YRS, why some drop out, why entire states do not have YRS. Are there social/cultural, geographic conditions which predispose a district to consider or not

consider YRS? Pinpoint types of communities ripe for YRS. Possible that data from this research would also provide information which could be incorporated into "how-to" handbook.

- Development of a planning handbook for school districts considering a calendar change. Compilation of data from school districts on what to do, and what not to do. This would include guides for dealing with the community at large, teachers unions, and local officials.

- Development of model for determining economic consequences of YRS. Could be used as a "how-to" type handbook. A number of cost-benefit studies exist which could be synthesized and distilled to help develop model and handbook.

- Identification of active and potentially interested business and lobby groups who have a stake in promoting or discouraging YRS.

- Study YRS as a vehicle for curriculum reform. Could be done in conjunction with several other of the suggested studies.

4.4 Long Range Policy Studies

In devising the projects to be included under the above rubric, one major assumption was made, viz., the federal policy research issues are and will be focused on the difference educational innovations (YRS in this instance) make in the lives of children, especially those children with special needs. The YRS literature, which now spans several decades, continues to emit a single question: Does YRS, in some form, assist students to develop at a faster rate? There was the belief among a number of educators in urban areas more than five decades ago that YRS did help European immigrant children. They believed with a year-round effort their acculturation could be increased, they could learn English faster, and retain what they learned longer; in the minds of a few reformers was the thought that these children could be kept out of the labor market. This was indeed an ambitious agenda for such a seemingly minor modification of a social institution.

The YRS calendar seems to have originally developed as a means to accelerate learning; it later became a method for keeping building costs down. However, despite the original goals and the more recent modifications, we still do not have a satisfactory answer to either major question. The following projects have been devised to meet the historic as well as present perceived policy needs.

- Study to compile evidence for a decrease in learning loss in YRS programs. Is there a differential effect on disadvantaged children? Establishment of testing program to measure this. If a learning loss decrease exists what implications does this have for Federal compensatory education programs?

- Study of Watsonville, California either separately or as part of larger study with emphasis on YRS as an approach to migrant education.
  - family interviews
  - migrant employer interviews
  - testing a comparison school
  - coordination with OPBE migrant evaluation.

- A Handicapped Special Study would be in order if the ideas and data from the Urbain H. Plavar School of Fountain Valley School are apt indicators of YRS and handicapped children's success. They hypothesized that frequent vacations (45-15 plan) would provide mental and physical relief. Their data indicate that, on this non-traditional calendar, their students seem to be more highly motivated to learn. A national study should be explored to determine if these effects can be found in other settings and under different YRS programs.

- Study to determine effect of YRS in the total cognitive, affective, psycho-motor areas. Reading and math are typically only areas evaluated yet school districts have in some cases revised their curriculum to stress human relations, ecology, the environment, activities out of doors. This will probably require the development of new learning evaluation tools.

- Study of YRS at the secondary level to evaluate its impact on students in school and their success after graduation. Several secondary level YRS programs have been in operation long enough to have had students who attended all of high school on YRS and have now graduated. Interviews with graduates, current students, parents, teachers, etc.; study of school records.

- Determine whether YRS has an effect on racial balance in a school district and how this occurs. Select sample of school districts which have YRS, a sizeable minority population, and either are actively trying to improve their schools' racial balance or which have poorly integrated schools and are not taking action to remedy this. Compare level of school integration before and after YRS; if level improved or decreases identify process by which this occurred and whether YRS appeared to be a contributing factor. There is evidence to indicate that YRS has helped and hindered integration. A predominantly black California high school began innovative YRS program which involved great deal of curricular revision. Whites in increasing numbers are voluntarily attending this high school because the YRS program is so attractive. The distribution of students among the staggered teams could be used as a tool for or against integration.

- Public opinion survey of public and business for level of knowledge about YRS, interest in, reservation and attitudes toward it.

- Analytical paper on anticipated social consequences of large-scale YRS in the nation.

- Study of effect of YRS on pattern of use of recreational facilities such as the National Park Service's and identification of what impact change in use patterns has on the administration and activities of these facilities.

- Comprehensive survey in area of attitudes and lifestyles which goes beyond emotional responses to YRS. Would measure how many people in a variety of communities would personally benefit from a rescheduled school year and would approach it as more in tune with their lifestyle (loggers, moving van drivers, farmers, summer resort operators, other people who work in industries subject to seasonal ups and downs, people who like hunting,

fishing, skiing, etc). Also, measure the number of people willing to have YRS in their school district as an option if it does not necessarily have to affect them. This last aspect has potential for vastly increasing the number of communities who can offer YRS since its presentation as an option would do away with the usual "majority must want it for themselves or we can't have it" approach to YRS.

- Studies of beginnning programs--pre and post observation of:
  - planning and implementation activities
  - community dynamics
  - curricular changes or impact of maintaining a traditional education program within a revamped school schedule
  - effects on students
  - effects on school administration
  - effects on parents
  - effects on community
  - economic/cost effects

- Research on voter attitudes toward new school construction once YRS is operating in a district. Comparison of results pre and post YRS building referendums, opinion survey of voters. Do voters show greater degree of support for new construction if they feel present structures are being economically used? Potential implications for federal, state and local tax structures.

- Identification and analysis of impact of YRS on community agencies and services, including YMCA, YWCA, boys' and girls' clubs, recreation departments and police departments. Determine whether YRS has forced these agencies to change the scope and quality of their activities and services, what these changes have been and what impact they have had on community life.

- Selection of sites serving military bases to examine reduction in schooling disruption from re-assignment of military personnel (like the migrant problem). Joint effort with Department of Defense. They should be interested in YRS schools on military bases or in school districts near military bases (Virginia Beach, Virginia, Colorado Springs, Colorado, Chino, California).

- Ascertain the extent to which YRS has had longterm serendipitious effects on curriculum reform and whether it uses reform ideas of previous projects (e.g., team teaching, talking typewriters, modularized instruction) and if so, how the transfer of technology and ideas was accomplished.

5.0 Summary of Findings

The process of examining the importance of the YRS movement produced a variety of general and specific policy-relevant findings. Among the general findings are four statements which seem to accurately characterize YRS at this juncture:

- YRS is a rapidly growing, locally initiated movement in education;
- YRS shows potential for providing districts with economic and space savings and educational gains;
- YRS is having or could have a significant effect on various federal programs and policies; and on American society in general;
- District evaluations of YRS are of inconsistent quality and provide inconclusive results regarding impacts.

Specifically, with respect to the current federal involvement in an education R&D program it was found that:

- Only the federal government has sufficient resources to carry out the needed research agenda for YRS.
- Only ASPE (not OPBE or NIE) seems interested in and has the requisite knowledge for developing a necessary YRS research agenda.
- A new philosophical underpinning will be needed if ASPE is to proceed with YRS research.
- In order for ASPE to continue its research into YRS a larger study and therefore more resources will be needed.

- YRS research is probably more potentially relevant to disadvantaged children and/or children with special needs (migrant, handicapped, juvenile delinquents) than might have been hypothesized prior to this study.

The first set of findings have been previously discussed. At this point what is important to emphasize is that among observers, researchers, and chroniclers, few educational innovations and reforms seem to receive less coverage and interest than YRS, yet few are as large. There is indeed a serious gap in our current educational research establishment's knowledge of widespread and growing movements. The gap exists in Washington among federal agencies charged with developing and implementing a federal R&D policy; it exists among private research organizations and among some members of the national press who normally report on education.

The specific findings which are pertinent to the continuation of YRS research and which may have an impact on educational innovation, the federal government's role, and indeed on the growth of YRS itself need more explication.

In our corporate and individual experiences which span a decade, only the federal government has had the mandated role, technical expertise, and resources to implement what we believe is a necessary YRS research agenda. However, we are aware that something of a philosophical change will have to occur if this is to reach fruition. The question in considering whether the federal government should undertake the next step in this process is: should the federal government study any promising innovations, even if the funding source is not the federal government? The answer provided here is: unequivocably "YES."

First of all a true educational R&D system would include any and all interesting innovations even though they might not be federally funded nor apparently relevant to existing

federal policy. Secondly, it seems as though it has been demonstrated here that YRS is a promising innovation. A few statements about the second criterion, relevance to existing policy, may be appropriate here. We believe YRS "fits." That is, given that only the federal government has the resources and that ASPE has shown it is the only group with both interest and ability to develop the necessary resources and technical skills for a large-scale study, it should continue YRS research. However, the findings here that YRS programs may be assisting children with special needs, makes our conclusions even more pertinent. ASPE has the responsibility for suggesting innovative approaches to educational problems of the poor (derived from receiving funds under Section 232 of the OEO legislation) and YRS has been effective in assisting migrant and handicapped children; it has also been hypothesized as assisting in solving some of the problems of juvenile delinquency. Thus, only ASPE has a sufficiently broad mission and interest to conduct some of the projects suggested above.

Finally, while the YRS research agenda suggested here calls for both philosophical changes on the part of the federal government, and possibly for a fairly radical change in resource allocation, the payoffs seem enormous. To date the present federal educational R&D program seems to be slightly defective. It seems to be a large-scale monitoring and evaluation system which does not pursue non-federally funded innovations. The opposite should be true: instead of responding to last year's or this year's federal policy, some amount of resources should be expended to exploring educational innovations without respect to their current status in the current administration.

If all or part of the suggested YRS research agenda can be implemented, the R&D system can begin to lead, to apply

innovations which have been developed at the local level on a national scale, to anticipate future crises, and finally to assist millions of Americans struggling with the enormous task of teaching their children how to read and write.

APPENDIX A:

Demographic and Programmatic Data

DEMOGRAPHIC DATA FOR SCHOOL DISTRICTS IN STUDY

	Total Population* (Most Recent Data Available)	Community Type: Urban	Community Type: Suburban	Community Type: Rural	Ethnic Breakdown: Black	Ethnic Breakdown: Spanish Speaking	Ethnic Breakdown: American Indian	Ethnic Breakdown: Other White	Ethnic Breakdown: Other	Occupational Characteristics: Professional	Occupational Characteristics: Blue Collar	Occupational Characteristics: Agricultural	Occupational Characteristics: Migrant	Occupational Characteristics: Military	Occupational Characteristics: Tourist Related	Occupational Characteristics: Second Spectrum	# Schools in District	# Schools in VHS at Start of Program	# Schools in VHS after Expansion	# Students in District*	# Students Attending VHS Schools at Start of Program	# Students Attending VHS Schools After Expansion*	# Disadvantaged in District*	% Disadvantaged in VHS	Grades Affected at Start of Program	Grades Affected After Expansion	Dominant Issue: Economic	Dominant Issue: Educational	Dominant Issue: Other
SUCCESSFUL																													
Hesperia, CA	105		✓		<1%	27%	<1%	69%									3	3	N.E.	1.0	1.0	N.E.	.17	100%	K-6	11.E	⊥	✓	
Chino, CA	57.0		✓		<1%	27%	<1%	68%									17	2	9	6.8	1.3	9.6	.9%	79%	K-8	K-12	⊥	✓	
Corona Norco, CA	14.0		✓		<1%	25%		75%									28	4	16	15.6	.8	7.3	N.A.	N.A.	K-9	K-12	⊥		
Chula Vista, CA	110.0	✓			10%	20%		45%	5%								76	4	7	N.A.	4.0	5.3	N.A.	N.A.	K-6	K-12	⊥		
Hayward, CA	24.0		✓		45%	19.2%	<1%	21%	39%								34	1	N.E.	13.0	.4	N.E.	.07	100%	K-6	N.E.	⊥	✓	
La Mesa-Spring Valley, CA	75.0		✓		<1%	10%		90%									22	3	4	15.0	2.0	2.7	.19%	86%	K-8	N.E.	⊥		
Pajaro Valley, CA	90.0			✓	<1%	50%		50%									21	3	N.E.	13.0	2.5	N.E.	3.5	25%	K-8	N.E.	⊥		✓
Colorado Springs, CO	200.0	✓			6%	9%	.3%	84%	.6%								50	2	5	35.0	2.0	5.2	5.4	0	K-8	K-8	⊥		
Molalla, OR	NA		✓		<1%		<1%	99%	<1%								1	1	N.E.	1.1	1.1	N.E.	.09	100%	1-8	N.E.	⊥	✓	
Mesa, MN	7.5		✓		<1%			99%	<1%								4	1	N.E.	1.9	1.0	N.E.	.19%	86%	1-6	N.E.	⊥		
Prairies Howell, MO	16.0		✓		<1%	<1%		99%	<1%								8	2	4	5.0	1.6	3.1	.25%	10%	1-8	1-8	⊥	✓	
Nantahala, NC	18.0			✓	<1%			99%									8	1	4	4.3	.2	1.3	N.A.	N.A.	K-5	K-12	⊥		
Valley View, IL	42.0	✓			5%	7.5%		85%									11	6	11	13.0	8.0	13.0	2.0	100%	K-8	9-12	⊥	✓	
Prince William County, VA	140.0		✓		1%	1%		92%									44	4	5	41.0	3.8	7.2	0	0	1-6	K-12	⊥		
Atlanta, GA	500.		✓		80%	<1%		10%	<1%								185	25	13**	138.0	13.1	N.E.	N.A.	N.A.	8-12	K-12*	⊥	✓	
Dade County, FL	1,000.	✓			← 63% →			35%									225+	7	25.	240.0	14.0	45.7	N.A.	N.A.	7-12	K-12	⊥		
Hudson, NH	13.0		✓		<1%			99%									4	1	N.E.	3.5	1.5	N.E.	0	0	9-12	N.E.	⊥		
DISCONTINUED																													
Milpitas, CA	30.5		✓		1%	16%		77%									16	16	N.E.	10.0	10.0	N.E.	1.0	100%	K-12	N.E.	⊥		
Loudoun County, VA	42.0		✓		12%	<1%		85%	<1%								24	4	N.E.	11.6	8.7	N.E.	N.A.	0	1-8	N.E.	⊥		
Virginia Beach, VA	220.0		✓		15%			85%									48	4	N.E.	48.0	6.0	N.E.	2.4.	10%	K-7	N.E.	⊥		
Champlain Valley, VT	10.0		✓		<1%			99%									6	1	N.E.	3.3	.03%	N.E.	N.A.	N.A.	9-12	N.E.	⊥		
NOT IMPLEMENTED																													
Elk Grove, CA	100		✓		2%	9%		85%	3%								16			11.0			N.A.				⊥	✓	
Roswell, NM	45.0		✓		4%	31%		65%									22			10.1			.9				⊥	✓	
Pennsbury, PA	52.0	✓			<1%	<1%		99%									18			14.0			0				⊥	✓	

* Numbers Given in Thousands
** Program declined in both number of schools and number of students
N.A. = Not Available N.E. = No Expansion ⊥ = Overcrowding 2 = Cost Effectiveness 3 = Greater Ethnic Balance

Programmatic Data for School Districts in Study

		Model	Mandatory	Voluntary	Pre-Model Planning: Feasibility	Surveys	Analysis/Implementation	Other	Citizen Involvement: All Phases	After Model Selection	None	Pre-Model Implementation Planning: Curriculum	Administration Needs	Teacher Training	Contract Negot./Modif.	Computer Schedules	Public Relations	Survey	Other	State Support for YRS: State $	Technical Asst.	Legislation	Other	Federal Support for YRS: Title I	Title IV	Title III	Other	Major Problem	Reason for Success
SUCCESSFUL																													
Hesperia, CA	1	45-15																											
Chino, CA	2	45-15										HS															TRACK BALANCE	INVOLVEMENT
Corona Norco, CA	3	45-15						PUBLIC MEETINGS																			TRACK BALANCE	SUPPORT, PARTICIPATION
Chula Vista, CA	4	45-15																									TRACK BALANCE	
Hayward, CA	5	4 Quarter																									TEACHER MORALE	FLEXIBILITY
La Mesa-Spring Valley, CA	6	45-15						PUBLIC MEETINGS																				
Paiazo Valley, CA	7	45-15																										
Colorado Springs, CO	8	CONCEPT 4 Quarter						PUBLIC MEETINGS											PARENT COMMITTEE LOCAL BOARD W/ADMIN.								SAME ENERGY ON DIFFERENT SCHEDULES	COMMUNITY SUPPORT
McClalla, OR	9	45-15						SITE VISITS											PUBLIC BOARD MEETINGS								USED MODEL ADMIN. & SEC. HELP	SMALL TOWN
Mora, MN	10	45-15																	PUBLIC BOARD MEETINGS								TRACK BALANCE	SMALL TOWN
Frances Howell, MO	11	45-15																	PUBLIC MEETINGS				BANKERS MINIMUM CHANGE				ISOLATION OF PROGRAM	WIDE SUPPORT
Westbrook, ME	12	45-15						PUBLIC RELATIONS											PUBLIC MEETINGS								U.S. CLASS/ATTENDANCE WORD — TRACK BALANCE	
Valley View, IL	13	45-15						PUBLIC MEETINGS											PLANNING YEAR							PUB. & SEC. REPRESENTATIVES	TRACK BALANCE	WIDE SUPPORT
Prince William County, VA	14	45-15																	SEC. ACTIVITIES								TRACK BALANCE	
Atlanta, GA	15	4-Quarter																	PARENT MEETINGS								CLASH BETWEEN ASIAN/RURAL LEGISL.	
Dade County FL	16	Quinmester																	PUBLIC & PTA MEETINGS									STUDENT/TEACHER ELIMINATION
Hudson, WI	17	4-Quarter																	PUBLIC MEETINGS								CROSSING BORDER FOR TEACHERS	
DISCONTINUED																												
Milpitas, CA	18	45-15						PUBLIC & PTA MEETINGS											PUBLIC & PTA MEETINGS								TRACK BALANCE	
Loudoun County, VA	19	45-15						SITE VISITS											PUBLIC MEETINGS								LACK OF ATTENDANCE SPACE	
Virginia Beach, VA	20	45-15																	PUBLIC MEETINGS								EXPIRE BASE NOT ON YRS	
Champlain, Valley, VT	21	Multi Access																	PUBLIC MEETINGS								TRACK BALANCE - TOWN SUPPORT - RURAL POP.	
																											LACK OF PARTICIPATION	
NOT IMPLEMENTED																												
Elk Grove, CA	22	45-15																	FINANCIAL ANALYSIS									
Boswell, NM	23	45-15																	PUBLIC MEETINGS									
Pennsbury PA	24	45-15																										

HS = High School

APPENDIX B:

Summary of Educational
and
Financial Evaluations

SUMMARY OF SCHOOL DISTRICT EDUCATIONAL AND FINANCIAL EVALUATIONS

SCHOOL AND SOURCES	EDUCATIONAL IMPACTS	FINANCIAL IMPACTS
SUCCESSFUL PROGRAMS 1. HESPERIA, CALIFORNIA Phone conversation with school district administrator.	1. Standardized tests after first year of YRE (1972)--not considered conclusive--test results mixed	1. Costs increased after first year--($16,949)--due to 12 month salaries; increased benefits; additional bus mileage Above figure low compared to $192,000 building costs for additional space needed
2. CHINO, CALIFORNIA Phone conversation with John E. McMurty, Assistant Superintendent for Instruction	2. Not Available	2. Not Available
3. CORONA NORCO, CALIFORNIA "Evaluation of Corona Norco Unified School District, Year-Round Plan, School Year 1972-73." Phone conversation with Dr. Mason, school district administrator	3. After first year--California Test of Basic Skills was used for 6th and 8th graders, and teacher-made English and social studies tests. "Overall there was a slight benefit shown by the year-round school students." (p. 7) Nothing conclusive.	3. Not Conducted
4. CHULA VISTA, CALIFORNIA Chula Vista City School District. Year-Round Schools: An Assessment of the Program's Initial Year in Four Chula Vista Elementary Schools. Chula Vista. 1972. Phone conversation with Douglas Giles, administrator	4. 2nd and 3rd grades were measured for reading skills after first year of YRS. 2nd grade showed greater achievement in the traditional program--no difference in 3rd grade	4. Per pupil costs were same in YRS and traditional--$2 million building costs saved

5. HAYWARD, CALIFORNIA Sorenson, Wayne L. Evaluation Report, A Feasibility Study: An Organizational and Curriculum Plan for a 4-Quarter Elementary School. Hayward Unified School District: Hayward. 1970. Third Evaluation Report: Park Elementary School--Four Quarter Extended Year Program, Hayward Unified School District: Hayward. 1974. Phone conversation with Wayne Sorenson, Administrative Director of Research and Federal Projects	5. Pupils in grades 2-6 given Science Research Associates' Modern Math Understanding Tests" and Stanford Achievement Test in reading--administered one month after start of YRS, 9/68, and 1 year after, 9/69. YRS scores compared with non-YRS school (reading test also given in 5/69). Reading results: 1st test in each grade except 6th showed higher scores in comparison school than in YRE. By May, average scores indicate that YRE students had made greater gains in half of the areas. By 9/69, two schools had practically the same scores. 10/72 tests and 1973 tests (grades 4,5,6) showed consistent gains in achievement of Park students over non-Park students, but the results seem to equal the one month more per year that Park students are in school. Grades 1,2,3--5/73 testing--Park pupils were below comparison school and district scores in reading--also at Park, 5/73 Grade 3 was somewhat lower than previous years. Other scores compared favorably.	5. Increase of 9.9%--increases in salaries of administrators, faculty and staff. Total cost of education per pupil per day: traditional -- $4.41 Park -- 4.41 but Park attends 19 additional instruction days.
6. LA MESA - SPRING VALLEY, CALIFORNIA La Mesa-Spring Valley School District. "Evaluation of Scholastic Achievement in the Year-Round School 1972-73." La Mesa. 1974. Phone conversation with Mr. Radenheimer, program administrator	6. Standard Achievement Tests used at various intervals to test YRS and traditional schools: no significant differences.	6. Not Conducted

7. PAJARO VALLEY, CALIFORNIA Pajaro Valley Unified School District. YRS Evaluation: First Year Report. 1974. Phone conversations with James Baker, Zone Administrator	7. California Test of Basic Skills (reading and math) and standardized tests showed no dramatic differences after first year. End of third and fourth years--comparable scores.	7. Operationally: 1.5% increase in YRS schools Building: 30.6% gain--saved in 5 years schools
8. COLORADO SPRINGS, COLORADO Colorado Springs School District #11. Second Operational Year Report of Concept 6 Year-Round School. Colorado Springs. 1975 Phone conversation with Dr. Roslyn Grady, Director of Department of Research and Special Studies	8. After first 2 years, Iowa Test of Basic Skills and Metropolitan Primary Tests and District's Standard French and Spanish Tests. Grades 1-3 scored higher on all tests. Math scores ranged 2-3 months above norm, while others ranged 7 months - 1 year. Grades 4,5,6 showed no significant differences.	8. Not Conducted
9. MOLALLA, OREGON Phone conversation with William Jordan, School Superintendent	9. Not Conducted	9. Not Conducted
10. MORA, MINNESOTA Phone conversation with Richard Smith, Project Director	10. Effects of YRS on learning, motivation and achievement tested by University of Minn. for first year (71-72) results not available.	10. Not Available
11. FRANCIS HOWELL, MISSOURI Francis Howell School District. "Francis Howell Year-Round School Plan." St. Charles County. 1972. Phone conversation with Alan M. O'Dell, Project Director	11. Not Conducted	11. Report published from grant study: "The results were not conclusive." (p.12)

12. NORTHVILLE, MICHIGAN Moortgat, R. A Study of Achievement and Absenteeism in the 45-15 Year-Round School Plan in the Northville Public Schools. Wayne State University. 1975. Phone conversation with Florence Pannatoni, Assistant Superintendent	12. SESAT (K-1) and Stanford Achievement Tests (Math and Reading). Students tested first month of each school year in 72-73, 73-74, and 74-75. First year there is no significant difference. Second year, YRS students score much higher than traditional school students--held true for low, medium and high achievers. (pp. 5-22).	12. Not Conducted
13. VALLEY VIEW, ILLINOIS Internal Evaluation Study Phone conversation with J. Patrick Page, Administrative Assistant	13. No significant differences on periodically administered standardized tests.	13. Not Available
14. PRINCE WILLIAM COUNTY, VIRGINIA "An Educational Choice." Brochure (1974). Education Turnkey Systems, Inc. 45-15 and the Cost of Education, Summary. Phone conversation with a district administrator	14. (1972) No conclusive evidence (differences are more classroom than structure related) --study was conducted by the Bureau of Educational Research at University of Virginia.	14. (71-72) Cost analysis of 45-15 in middle school--considers costs of supplies, staff, plant maintenance. YRS showed 9.6% lower costs than traditional, 4.9% more intensive labor use, 4.7% more intensive plant use (4.2% of this was the result of housing 1/3 more students)
15. ATLANTA, GEORGIA Evaluation of Fourth Quarter, 1974, Research and Evaluation Report, Vol VIII No. 3, 12/74, Atlanta Public Schools, Atlanta. Phone conversation with Dr. E. Curtis Hensen, assistant superintendent	15. Not Available	15. Fourth quarter voluntary--no summer costs, even if the quarter is part of a student's 180 days, are funded by state. Therefore, entire cost of summer quarter, approximately $2 million, must be borne by local taxes.

16. DADE COUNTY, FLORIDA Dade County Public Schools, Division of Finance Planning. Cost Analysis of the Quinmester Program. Miami. 1972. Dade County Public Schools, Division of Instruction. Status-Activities and Direction of the Quinmester Program. Miami. 1972 Phone conversation with district administrators	16. Stanford Achievement Tests and failure rates in 5 subject areas used to determine student achievement in YRE. Quinmester schools compared grade by grade with schools with their own geographic area and with county as a whole and also compared scores from 1971 pre-quinmester tests to scores from post-quinmester tests in 1972. Mean and median scores compared. Reading and math scores for 1972 lower than those for 1971 at approximately 50% of the grade levels in the given schools (comparison with county schools indicate that they too dropped in some areas, but suffered even greater drops) Quinmester scores did not score higher than county schools in 1971. Quinmester failure rates remain below county rates as in 1971.	16. Direct costs per student in ADA comparison of first and fifth quinmesters at 19 quinmester schools--5th quinmester direct costs were higher (could be reduced to comparable level by increasing 5th quinmester attendance from 10-28,000) ADA direct cost comparison between 5th quinmester and (71) previous summer school offering--5th quinmester costs were lower ADA direct cost comparison between 1st 4 quinmesters and regular 9-month school--costs comparable (1971-72)
17. HUDSON, NEW HAMPSHIRE Phone conversation with Robert Bettencourt, Principal, Alvirne	17. No significant gains or losses (165 day school year)	17. Comparison of operational costs (e.g., air conditioning, teachers' salaries, heat)--YRS operating budget 3-4% higher than operating costs when school was on traditional calendar (notes do not indicate if data were weighted for inflation).

DISCONTINUED PROGRAMS		
1. MILPITAS, CALIFORNIA Phone conversation with school administrator	1. Not Available	1. Not Available
2. LOUDOUN COUNTY, VIRGINIA Loudoun County Schools Planning Department, 45-15 Program Status Report. Leesburg, Virginia. 1974. Phone conversation with Dr. Arthur Welch, Director of Planning	2. Metropolitan Achievement Tests (1-3) and SRA Achievement (4-6) given at end of 1st and 2nd years with Virginia Standardized Achievement Tests--YRS students scored slightly higher*.	2. Cost comparison of YRS with traditional school--results not in
3. VIRGINIA BEACH, VIRGINIA Virginia Beach Public Schools. A Research Design for Year-Round Education. Virginia Beach. 1973	3. After 1st two years of program, 1st, 2nd, and 4th grades studied in regard to reading--4th grade also tested for math achievement. Linear systems analysis of 4 participating elementary YRS schools with 2 traditional program. The results not available.	3. Comparison in terms of capital and operating costs--cost savings in YRE $8 per student.
4. CHAMPLAIN VALLEY, VERMONT Phone conversation with Mr. Lambert, administrator	4. Not Available	4. Not Available

*In comparison between Spring '73 (9 month) and Spring '74 (45-15) in grade 2, YRS higher for spelling and math; in 1st grade YRS was lower in word analysis; in 3rd grade no differences showed up. (p. 12) There is some tangible evidence that improvements may have occurred in 45-15, but this is a highly tentative conclusion.